Before the Federal Communications Commission Washington, D.C. 20554

In the Matter of)) WC Dock	et No. 04-36
)	
IP-Enabled Services)	

To: The Commission

REPLY COMMENTS OF NUVIO CORPORATION

Nuvio Corporation ("Nuvio"), by its attorneys, hereby files these reply comments in the above-captioned proceeding.¹ As discussed in Nuvio's initial comments, IP-enabled services, including voice over IP ("VoIP"), should remain unfettered by any regulation beyond what is absolutely necessary to further compelling policy goals to ensure that all U.S. consumers will enjoy the benefits of increased competition and enhanced communications capabilities afforded by IP-enabled services.²

In these reply comments, Nuvio underscores certain matters raised in its initial comments and addresses additional issues noted by other commenters in this proceeding. In particular, Nuvio maintains that IP-enabled services: (i) are interstate information services that should be subject to a single, unified federal regulatory regime of minimal regulation; (ii) should not be subject to Universal Service Fund ("USF") and intercarrier compensation regimes, which are currently being overhauled by the Commission;

¹ See In the Matter of IP-Enabled Service, Notice of Proposed Rulemaking, WC Docket No. 04-36, FCC 04-28 (rel. March 10, 2004) ("NPRM").

² See generally Comments of Nuvio Corporation, WC Docket No. 04-36 (filed May 28, 2004) ("Nuvio Comments").

(iii) afford appropriate consumer protections without the need for intrusive government regulation aimed at monopoly telecommunications providers; and (iv) will enhance competition, expand communications services options and lower costs for consumers in rural areas.

I. THE COMMISSION SHOULD ADOPT A UNIFIED NATIONAL REGULATORY REGIME FOR IP-ENABLED SERVICES

It is essential that IP-enabled services, including VoIP, be subject to a unified national regulatory regime of minimal regulation rather than a myriad of disparate state requirements. The possibility that VoIP providers may be subject to 50 different regulatory regimes and extensive federal regulation designed to address monopoly control of telecommunications facilities would significantly undermine the development and deployment of IP-enabled services, and would give incumbent communications service providers an insurmountable competitive advantage -- directly contrary to the Commission's pro-competitive and deregulatory policies for next-generation communications services. However, because VoIP and other IP-enabled services are properly considered interstate information services, the Commission may exercise exclusive federal jurisdiction and, consistent with its treatment of enhanced services and information services generally, exclude IP-enable services from the broad range of regulation associated with traditional telecommunications services.

A. IP-Enabled Services Are Inherently Interstate

Certain incumbent telecommunications providers seek to burden competitive IPenabled services with a multitude of state regulations by suggesting that such services are subject to the same dual federal-state jurisdictional framework as circuit-switched services. However, IP-enabled services are inherently interstate in nature and thus should be subject to exclusive federal regulation.

Unlike traditional telecommunications traffic, IP-enabled services are not routed based upon the geographic location of the network end points or the number associated with them. Indeed, such services transcend traditional jurisdictional boundaries and cannot be separated into interstate and intrastate components. In the *Pulver.com* decision, the Commission recognized that geography is not relevant to the flow of information over the Internet. The Commission stated that "even if the members' locations were somehow relevant to their use of [Free World Dialup], [its] portable nature without fixed geographic origination or termination points means that no one but the members themselves would know where the end points are." This inability to distinguish between intrastate and interstate traffic on the Internet creates a compelling need for the Commission to declare such traffic inherently interstate based on the Commission's "mixed use" doctrine. 4

The inability to distinguish between intrastate and interstate IP-enabled services also implicates the Commerce Clause of the U.S. Constitution. As the Commission explained in the *Pulver.com* decision, the Commerce Clause denies "the States the power unjustifiably to discriminate against or burden the interstate flow of articles of

³ See Petition for Declaratory Ruling that pulver.com's Free World Dialup is Neither Telecommunications Nor a Telecommunications Service, *Memorandum Opinion and Order*, WC Docket No. 03-45 (2004) at ¶ 21 ("Pulver.com Order").

⁴ See NPRM at \P 39.

commerce."⁵ The Commission further stated that "[t]he nature of [Free World Dialup] as an Internet application is not bound by geography may well render an attempt by a state to regulate any theoretical intrastate [Free World Dialup] component an impermissible extraterritorial reach."⁶ Similarly, it is not possible for Nuvio to identify the geographic location of its VoIP customers because the service is fully portable and can be accessed from any worldwide location with a broadband connection. Thus, as with Pulver.com, "one state's regulation of [Nuvio's VoIP service] may have the practical effect of requiring those same regulations to be applied to [Nuvio's] service for all users," in contravention of the Commerce Clause.⁷

VoIP service providers simply will not be able to compete effectively against incumbent carriers if they are forced to comply with over 50 state jurisdictions for some or all of their VoIP offerings. Among other things, many VoIP providers would be forced to cease operating because of indeterminate potential liability associated with customer use of the service in a manner that may be inconsistent with state regulatory requirements (*e.g.*, if a customer accessed the service from a different state), even though the provider has no control or knowledge of the customer's location. Because disparate state regulation would undermine the Commission's regulatory objectives and it is not

⁵ See Pulver.com Order at \P 23 (citing Cotto Waxco Co. v. Williams, 46 F.3d 790, 793 (8th Cir. 1995)).

⁶ *Id*.

⁷ *Id*.

possible to separate the interstate and intrastate aspects of IP-enabled services, the Commission should exercise exclusive federal jurisdiction over such services.⁸

B. IP-Enable Services Are Properly Considered Information Services

Some incumbent telecommunications providers also argue that many VoIP and other IP-enabled services are not "information services," but rather are telecommunications services subject to Title II of the Communications Act, as amended. Others seek to identify certain characteristics that should define VoIP services as telecommunications services, without regard to how VoIP services are offered or the other characteristics and communications capabilities of these services. ¹⁰

IP-enabled services, including VoIP, are properly classified as information services. Most VoIP service providers enable consumers to communicate amid the differing formats of the public switched telephone network ("PSTN") and the Internet by performing a net protocol conversion, thereby transforming the information transmitted by the customer. Most VoIP providers also offer access to stored information and other enhanced services through the use of their services. The Communications Act, as amended, defines "information services" as "the offering of a capability for generating, acquiring, storing, transforming, processing, retrieving, utilizing or making available

 $^{^8}$ See NPRM at \P 41 (citing Texas Office of Pub. Util. Counsel v. FCC, 183 F.3d 393, 422 (5th Cir. 1999)).

⁹ See, e.g., Comments of CenturyTel, Inc. WC Docket No. 04-36 (filed May 28, 2004) at 2 ("CenturyTel Comments").

 $^{^{10}}$ See Comments of Sprint Corporation, WC Docket No. 04-36 (filed May 28, 2004) at 7-8 ("Sprint Comments").

information via telecommunications."¹¹ Because most VoIP services (including those of Nuvio) satisfy this definition, they are properly considered information services.

In the recent *Pulver.com* and *AT&T* decisions, the Commission further clarified the distinction between information services and traditional telecommunications services in the context of IP telephony. In *Pulver.com*, the Commission concluded that the Free World Dialup application, which allows users to communicate with each other using specialized consumer premises equipment ("CPE")¹² over their existing broadband connections, was an offering of an information service and not telecommunications.¹³ In addition to other factors, the Commission noted the fact that Free World Dialup users provided their own broadband connectivity to utilize the service and thus Free World Dialup did not provide "transport," a hallmark of telecommunications service.¹⁴

In the *AT&T* decision, the Commission classified AT&T's "phone-to-phone" IP telephony as a telecommunications service. In that case, however, AT&T merely utilized the Internet to route calls to and from the traditional circuit-switched service network without offering information services or other enhanced communications capabilities (*e.g.*, access portability). AT&T's VoIP customers simply utilized their existing CPE connected to the PSTN, but did not "place or receive calls any differently than they do

¹¹ 47 U.S.C. §153(20).

¹² In that case, the specialized CPE is the user's computer loaded with Free World Dialup software. As a result, the Commission labeled the service "computer-to-computer" IP telephony.

¹³ See generally Pulver.com Order.

¹⁴ See id., ¶ 9.

through AT&T's traditional circuit-switched long distance service." Because AT&T offered its customers "only voice transmission with no net protocol conversion," the Commission concluded that the service was telecommunications. Indeed, it appears that many of AT&T's customers were not aware that they were utilizing any type of VoIP.

Nuvio's VoIP offerings share many of the features identified in the *Pulver.com* decision as attributes of information services. For example, like the Free World Dialup service, Nuvio's VoIP service relies on users to provide their own broadband access. The Commission observed that "[Free World Dialup] is not 'telecommunications' [because] ... Pulver neither offers nor provides transmission to its members. Rather, Free World Dialup members 'bring their own broadband' transmission to interact with the [Free World Dialup] server." Similarly, Nuvio's VoIP offerings lack this essential characteristic of telecommunications because users provide their own transmission in the form of a broadband connection to the Internet obtained from a third party.

Nuvio's VoIP service is also similar to the Free World Dialup offering because of the enhanced services that Nuvio provides to its customers. In *Pulver.com*, the Commission concluded that Free World Dialup offered "a capability for generating, acquiring, storing, transforming, processing, retrieving, utilizing, or making available

¹⁵ See Petition for Declaratory Ruling that AT&T's Phone-to-Phone IP Telephony Services are Exempt from Access Charges, Order, WC Docket No. 02-361 (rel. Apr. 21, 2004) at ¶ 12 ("AT&T Order").

¹⁶ *Id*.

¹⁷ Pulver.com Order at \P 9.

information via telecommunications." Free World Dialup provides services such as voicemail and the ability of members to determine if other members are available to talk. Nuvio's VoIP service also offers a variety of interactive services, including voicemail, voicemail to email, automatic update/upgrade of CPE, usage history, codec or protocol selection, and directory services. The ability of IP-enabled services such as Nuvio's VoIP offerings to provide information services in addition to simple voice transmission distinguishes them from AT&T's IP-based telecommunications service, which provides "only voice transmission with no net protocol conversion."

What VoIP is, or more accurately stated, has fundamentally done, is shift voice from being a service to an application provided as part of a broader offering of communications capabilities. Customers seeking voice communication alternatives come to Nuvio knowing that they are not getting traditional voice transmission service -- they are getting a comprehensive suite of communications capabilities unlike anything available on the PSTN. The fact that Nuvio interconnects with the PSTN to terminate calls to or receive calls from certain individuals does not make it a telecommunications service. Rather, the need for Nuvio's specialized CPE and for customers to "bring their own broadband," the net protocol conversion to enable communications with the traditional PSTN, and the broad array of features and services provided by Nuvio confirm that its VoIP offerings are an information service.

¹⁸ *Id.*, ¶ 11.

¹⁹ *Id*.

²⁰ *AT&T Order* at ¶ 12.

II. THE COMMISSION SHOULD NOT SUBJECT IP-ENABLED SERVICES TO FLAWED USF AND INTERCARRIER COMPENSATION REGIMES

Like the attempts to subject IP-enabled service providers to Title II regulation, claims by telecommunications incumbents that VoIP providers should be directly exposed to the Commission's USF and intercarrier compensation regimes also appear designed to unduly burden communications alternatives and inhibit competition from IP-enabled services, even though VoIP providers such as Nuvio already support the USF program and pay appropriate access charges;. For example, under the guise of "revenue neutrality," CenturyTel (a LEC providing telecommunications services to mostly rural and small urban communities in 22 states) seeks continued protection from competition by suggesting that the Commission inappropriately impose on VoIP providers regulatory requirements designed to address transfers of costs and payments among monopoly owners of telecommunications facilities. Such regulation has no place in the context of providing Internet-based services.

As discussed in Nuvio's initial comments, Nuvio and other VoIP providers are retail purchasers of telephone circuits and are charged USF fees by LECs and ILECs. As a result, contrary to the arguments that VoIP services circumvent the USF system entirely, VoIP providers already contribute significantly to the funding of the USF program.²³ Similarly, LECs are already fully compensated for the origination and

²¹ See, e.g., Comments of BellSouth Corporation, WC Docket No. 04-36 (filed May 28, 2004) at 23-25, 43-49 ("BellSouth Comments") at 23-25, 43-49; Sprint Comments at 21-23, 41.

²² See CenturyTel Comments at 19-21.

²³ See Nuvio Comments at 11.

termination of communications and enhanced services traffic on the PSTN and the broadband facilities obtained by a Nuvio customer to access the service.²⁴

The Commission has also recognized that its existing access charge and intercarrier compensation regimes are in need of fundamental reform, and rulemaking proceedings designed to overhaul these regimes are underway. It would be a mistake to subject next-generation IP-enabled services, and VoIP services in particular, to flawed compensation regimes that are based on legacy network architectures and outdated policies developed to address monopoly control of communications facilities -- particularly where USF contributions and intercarrier compensation payments are already being made today.

III. IP-ENABLED SERVICES AFFORD APPROPRIATE CONSUMER PROTECTIONS WITHOUT THE NEED FOR INTRUSIVE FEDERAL REGULATION

Nuvio believes that market forces in the highly competitive communications services marketplace, as well as existing Commission requirements applicable to IP-enabled service provider relationships with traditional carriers, will enhance consumer choices and fully address issues associated with consumer protection, public safety and related matters. For example, as discussed in Nuvio's initial comments, the VoIP industry has been proactive with respect to developing solutions for access to emergency services and will likewise develop solutions for disability access that take advantage of the core functionalities of VoIP services. Consumer protection measures developed to

^{1/1}

²⁴ For example, in the context of a call originated by and terminated to a Nuvio customer, the traffic is carried between the customer and Nuvio's call servers via the Internet over a broadband connection that is paid for by the Nuvio customer. LECs are also compensated for traffic originating and terminating on the PSTN pursuant to the normal agreements and arrangements between carriers. *See id.* at 10-11.

govern monopoly telecommunications providers are inappropriate in the context of VoIP ²⁵

Nonetheless, it has been suggested that consumer protection provisions, including 911/E911, privacy and consumer fraud protections should apply equally to VoIP service providers.²⁶ The record is replete with evidence that VoIP providers are working diligently to develop a workable 911/E911 emergency access solution as expeditiously as possible, so the Commission should afford our industry the opportunity to complete this important work before imposing a regulated solution.²⁷ With respect to more traditional consumer protection issues, however, any suggestion that regulations applicable to telecommunications carriers should be applied to VoIP providers evidences a fundamental misunderstanding of VoIP services.

Many of the tactics in the telecommunications industry that have prompted regulatory action are not present in the VoIP services market. Some of these practices, such as "slamming," are simply not possible because of the way VoIP services are provided. For example, a customer could not be unwittingly switched to Nuvio's service because the service cannot be provided without Nuvio's specialized CPE equipment, which cannot be shipped without specific customer information and authorization, as well

²⁵ Nuvio Comments at 9-13.

²⁶ See, e.g., CenturyTel Comments at 22-24.

²⁷ See, e.g., Comments of 8x8, Inc., WC Docket No. 04-36 (filed May 28, 2004) at 21-22; Comments of Voice on the Net (VON) Coalition, WC Docket No. 04-36 (filed May 28, 2004) at 24-25; Comments of Nortel Networks, WC Docket No. 04-36 (filed May 28, 2004); Comments of Vonage Holdings Corp., WC Docket No. 04-36 (filed May 28, 2004) at 37-45; Comments of the National Emergency Number Association, WC Docket No. 04-36 (filed May 28, 2004); Comments of PointOne, WC Docket No. 04-36 (filed May 28, 2004) at 27-28; Comments of Net2Phone, Inc., WC Docket No. 04-36 (filed May 28, 2004) at 22-23.

as payment of an initial activation fee. Deceptive billing practices have not been a problem for a number of reasons, including (i) the availability of alternative providers in the event of potential billing irregularities; (ii) typical provision of local and long distance VoIP based on a flat monthly fee; and (iii) widespread use of credit card payment, which ensures a greater ability to dispute charges in the event of inaccuracies.

Consumer privacy also has not been an issue because the availability of alternative providers allows customers to factor privacy protection into their choice of service providers. In the traditional telecommunications marketplace, where consumers typically had no choice but to obtain service from the monopoly telecommunications carrier, regulation was appropriate to ensure customer privacy. In the highly competitive market for VoIP services, however, consumers have numerous service options and can select a provider that satisfies their privacy needs. For example, although Nuvio is not subject to regulation on the use of customer information, it has adopted a privacy policy that legally requires it to keep customer information confidential.²⁸

Accordingly, there is no need to impose additional consumer protection regulations on VoIP providers. VoIP providers offering service in the United States are subject to the same state and federal consumer protection, unfair competition and privacy laws as other businesses. The issues associated with traditional telecommunications services that prompted consumer privacy regulation, including monopoly access to customers, are not present in the market for VoIP services and thus regulatory action is unnecessary.

_

²⁸ See Nuvio Corporation Privacy Policy, available at < https://www.nuvio.com/privacy.php>.

IV. IP-ENABLED SERVICES WILL ENHANCE COMPETITION AND CONSUMER CHOICE IN RURAL AREAS

Because IP-enabled services transcend jurisdictional boundaries and do not require the deployment of extensive new "last mile" facilities, they offer rural customers unparalleled opportunities to choose among different communications service offerings and providers. Despite this pro-competitive potential -- or perhaps because of it -- CenturyTel argues that the Commission's regulation of IP-enabled services should be designed to protect the revenue streams of rural telecommunications carriers. Nuvio is acutely aware of the issues associated with the provision of service to small urban and rural communities because Nuvio specifically targets such markets for its VoIP services. Nuvio vehemently rejects the assertion that protection of incumbent rural carrier revenues should factor into the Commission's decisionmaking regarding the regulation of IP-enabled services.

Rural customers are harmed by limited access to monopoly telecommunications providers -- not by new and emerging technologies that promise to greatly expand consumer choice. Through their offerings, IP-enabled service providers are dramatically expanding the availability and lowering the costs of communications services to high-cost and rural areas, and are contributing significantly to the Commission's universal service goals. Moreover, VoIP providers are not given a "free ride" over LEC facilities as asserted by CenturyTel.³⁰ As noted previously, LECs are fully compensated for the use of their telecommunications service either through negotiated interconnection

²⁹ CenturyTel Comments at 19-21.

³⁰ See *id.* at 19.

agreements with CLECs or the IXCs that Nuvio uses to terminate traffic. Also, calls originated by and terminated to Nuvio customers are carried between the customer and Nuvio's call services via the Internet over a broadband connection that the Nuvio customer pays for. Thus, there is no "free ride" in the context of Nuvio's VoIP offering.

Nuvio also challenges the notion that "the driving force behind access to [rural] broadband is incumbent LEC investment" and, as such, incumbent LEC revenues must be protected.³¹ Incumbent LECs in rural areas have enjoyed monopoly status for years but broadband deployment has languished. Thus, rather than being the "driving force" behind rural broadband deployment or the introduction of innovative new communications services, ILECs have leveraged their monopoly and cartel like status to preserve existing revenues and protect the bottom line.

Now, IP-enabled services, including VoIP offerings, have the potential of driving the deployment of broadband to rural and high-cost areas, and eliminate the stranglehold of rural ILECs over their captive customers.³² For example, municipalities, wireless Internet service providers ("WISPs") and IP-enabled service providers are working to bring broadband to rural areas that have been essentially ignored by monopoly LECs, and offering advanced communications capabilities that can finally bridge the "Digital"

2

³¹ See *id.* at 21.

³² See Submissions to Congressional Internet Caucus Advisory Committee, "VOIP: Why is it not your parents' Plain Old Telephone Service (POTS?)" (March 16, 2004), available at http://www.netcaucus.org/events/2004/voip/onepagers/; see also "Lawmakers Tout Tariff Free VoIP Bill" (April 2, 2004), available at http://www.internetnews.com/xSP/article.php/3335321.

Divide."³³ Similarly, the low-cost services offered by IP-enabled service providers will advance the Commission's universal service goals by making USF contributions go farther in bringing communications services to rural and underserved areas. Any suggestion that ILEC revenues must be protected to facilitate broadband deployment is little more than an attempt to preserve ILEC monopoly status, ignores the reality of lackluster broadband deployment by ILECs to date, and would undercut the substantial benefits of increased competition afforded by IP-enabled services; and therefore must be rejected.

V. CONCLUSION

Nuvio respectfully requests, consistent with its initial comments and these reply comments, that the Commission adopt a unified national policy for IP-enabled services that implements a "hands off" approach to VoIP services and allows these services to flourish in an environment generally unburdened by government regulation.

Respectfully submitted,

NUVIO CORPORATION

s/ Philip L. Malet

By:

Philip L. Malet Carlos M. Nalda **Steptoe & Johnson LLP** 1330 Connecticut Avenue, NW Washington, DC 20036 (202) 429-3000

Counsel for Nuvio Corporation

July 14, 2004

_

³³ See generally Federal Communications Commission, Record of the 2004 Wireless Broadband Forum (available at http://wireless.fcc.gov/outreach/2004broadbandforum/).